UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

WACOH COMPANY,

Plaintiff,

v.

ANALOG DEVICES, INC.
and ROBERT BOSCH LLC,

Defendants.

Case No. 2:09-CV-10119
(Consolidated with No. 2:09-CV-10123)

Honorable Julian Abele Cook, Jr.

Magistrate Judge Michael Hluchaniuk

Hearing date: Nov. 16, 2010, 9:00 a.m.

DEFENDANTS ANALOG DEVICES, INC.'S AND ROBERT BOSCH LLC'S RESPONSIVE CLAIM CONSTRUCTION BRIEF

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ISSUE PRESENTED

Claim construction is a matter of law by which the trial court defines the proper scope of the claimed invention in a patent. As described in ADI's and Bosch's Opening Claim Construction Brief, the parties disagree on the meaning of the following eight claim terms in the patent-in-suit, U.S. Patent No. 6,512,364 (the "'364 patent"):

- "a transducer for transforming said spatial deviation into an electric signal"
- "working body"
- "spatial deviation"
- "providing a capacitance element"
- "capacitance element"
- "deviation electrode"
- "fixed electrode"
- "Coulomb force"

The issue presented in this Responsive Claim Construction Brief is how these terms should be defined, in the light of how the inventor described the boundaries of his alleged invention in the '364 patent.

CONTROLLING OR MOST APPROPRIATE AUTHORITIES

Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*)

Becton, Dickinson & Co. v. Tyco Healthcare Group, LP, Nos. 2009-1053, 2009-1111, ___ F.3d ____, 2010 WL 2977612 (Fed. Cir. July 29, 2010)

ICU Med., Inc. v. Alaris Med. Sys., Inc., 558 F.3d 1368 (Fed. Cir. 2009)

Honeywell Int'l, Inc. v. ITT Indus., Inc., 452 F.3d 1312 (Fed. Cir. 2006)

C.R. Bard, Inc. v. United States Surgical Corp., 388 F.3d 858 (Fed. Cir. 2004)

Gaus v. Conair Corp., 363 F.3d 1284 (Fed. Cir. 2004)

Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340 (Fed. Cir. 2004)

Alloc, Inc. v. International Trade Comm'n, 342 F.3d 1361 (Fed. Cir. 2003)

SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337 (Fed. Cir. 2001)

Honeywell Int'l Inc. v. Universal Avionics Systems Corp., 493 F.3d 1358 (Fed. Cir. 2007)

Defendants Analog Devices, Inc. ("ADI") and Robert Bosch LLC ("Bosch") respectfully submit this brief in response to the opening claim construction brief filed by plaintiff Wacoh Company ("Wacoh") on September 7, 2010 (Docket No. 91 ("Wacoh Br.")).

I. INTRODUCTION

The Federal Circuit has repeatedly made clear that the patent specification is "the single best guide" to the meaning of disputed claim terms. In this case, the specification of the '364 patent describes only one type of acceleration sensor — a sensor that detects acceleration by "transforming" a "mechanical deformation" caused by the movement of a pendulum-like "working body" into an electric signal. The patent also describes only one method for testing this sensor — a method that first requires forming a distinct "capacitance element" inside the sensor to generate Coulomb forces that mimic acceleration by moving the working body. No other sensor or test is even hinted at in the patent. In light of this, the disputed claim terms of the '364 patent should be interpreted, as ADI and Bosch propose, to implement this type of sensor and test. They should not be interpreted, as Wacoh proposes, to improperly extend its limited patent rights to other types of sensors and tests that use entirely different mechanisms and that the inventor neither conceived nor described how to make or use.

II. ARGUMENT

A. The sensor structure claim terms should be interpreted to cover only "mechanical deformation" sensors.

The first three claim terms that need to be interpreted relate to the physical structure and operation of the sensor: (1) "a transducer for transforming . . . ," (2) "working body," and (3) "spatial deviation." The primary dispute is whether or not these terms should reflect the fact that the inventor Okada only invented and described a certain type of sensor in which "mechanical deformation" is used to trigger an electric signal. In arguing that they should, ADI and Bosch

have proposed constructions that are faithful to Okada's own description of his invention in the patent specification. Wacoh, on the other hand, glosses over the patent specification and instead relies primarily on dictionary definitions divorced from the context of the invention. The parties' proposed constructions of these three terms are set forth below.

Term	ADI's and Bosch's Proposed Construction	Wacoh's Proposed Construction
"A transducer for transforming said spatial deviation into an electric signal"	"a device for transforming a mechanical deformation, which results from the spatial deviation of the working body, into an electric signal"	Plain meaning
"working body"	"a structure that transmits the received force to the transducer"	Plain meaning
"spatial deviation"	"movement that includes a vertical direction"	"movement"

1. The "transducer" triggers the electric signal using mechanical deformation.

The parties dispute whether the claimed "transducer" must "transform" the spatial deviation of the working body into an electric signal by way of a mechanical deformation, as ADI and Bosch argue (Docket No. 93 ("ADI/Bosch Br.") at 13-20), or by any mechanism whatsoever, as Wacoh argues (Wacoh Br. at 10-11).

As ADI and Bosch explained in their opening brief, the claimed "transducer" should be limited to sensors that use mechanical deformation to trigger the electric signal because that is the only invention described by Okada in the specification of the '364 patent. ADI/Bosch Br. at 2-9; 13-20. In particular, mechanically deforming piezoresistive elements is the *only* mechanism described by Okada in the '364 patent for transforming the movement of the working body into

an electric signal. *Id.* at 3-8; 13-15. No other mechanism is even hinted at in the patent. *Id.* Indeed, Okada described this mechanism in his patent as the "basic principle of detection" of his invention. *Id.* at 14 (quoting '364 patent, col. 15, *ll.* 52-67). He also acted as his own lexicographer by expressly defining his "transducer" as being "formed for transforming a mechanical deformation to an electric signal." *Id.* at 14 (quoting '364 patent, col. 9, *ll.* 39-41). ADI's and Bosch's proposed construction tracks Okada's own definition of "transducer" and also hews to his description of his invention.

With one exception noted below, Wacoh completely ignores Okada's description of his invention in the specification. Wacoh instead argues that "transducer" should be given its "plain meaning," which it plucks from the fifth of seven generic definitions in a dictionary. Wacoh Br. at 10-11 (citing Ex. C).[1] But the Federal Circuit sitting *en banc* has squarely rejected this approach to claim construction. In *Phillips v. AWH Corp.*, 415 F.3d 1313 (Fed. Cir. 2005) (*en banc*), the Federal Circuit repudiated a line of cases that had given undue prominence to dictionary definitions and that had "limit[ed] the role of the specification in claim construction to serving as a check on the dictionary meaning of a claim term." *Id.* at 1320. The *Phillips* court reaffirmed the importance to claim construction of the inventor's description of the invention in the patent specification, and held that the specification is "the single best guide to the meaning of a disputed [claim] term." *Id.* at 1315.

In this case, the specification of the '364 patent is permeated from beginning to end with statements that mechanical deformation is used to trigger the electric signal and that this is the "basic principle" of "the invention." ADI/Bosch Br. at 6-8. Wacoh's proposed construction

[1] Wacoh incorrectly asserts that this definition from a dictionary published in 2000 is "contemporaneous to the invention" (Wacoh Br. at 11), even though Wacoh filed the original patent application with the description of the invention ten years earlier.

based on a dictionary definition should be rejected because it ignores the specification and therefore is inconsistent with *Phillips* and other similar Federal Circuit precedent which, as discussed at length in ADI's and Bosch's opening brief, limits the claim language to the invention described in the specification. ADI/Bosch Br. at 16-20 (citing *ICU Med., Inc. v. Alaris Med. Sys., Inc.*, 558 F.3d 1368, 1374-75 (Fed. Cir. 2009); *Honeywell Int'l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006); *C.R. Bard, Inc. v. United States Surgical Corp.*, 388 F.3d 858, 863 (Fed. Cir. 2004); *Microsoft Corp. v. Multi-Tech. Sys., Inc.*, 357 F.3d 1340, 1348-50 (Fed. Cir. 2004); *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368-73 (Fed. Cir. 2003); *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1339-43 (Fed. Cir. 2001)).

The only part of the specification that Wacoh even acknowledges in defending its "plain meaning" construction of "transducer" is Okada's statement defining his "transducer" as being "formed for transforming a mechanical deformation to an electric signal." '364 patent, col. 9, *ll.* 39-41; Wacoh Br. at 11. As ADI and Bosch explained in their opening brief, by assigning this definition to "transducer" in the context of his invention, Okada acted as his own lexicographer and his chosen definition governs. *Phillips*, 415 F.3d at 1316 ("[T]he specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess" in which case "the inventor's lexicography governs"); *Honeywell Int'l Inc. v. Universal Avionics Systems Corp.*, 493 F.3d 1358, 1361-64 (Fed. Cir. 2007) ("When a patentee defines a claim term, the patentee's definition governs, even if it is contrary to the conventional meaning of the term").

Wacoh's cursory argument that Okada's definition of "transducer" in the '364 patent should be ignored because it relates to a "preferred embodiment" (Wacoh Br. at 11) is incorrect

and should be rejected. Contrary to Wacoh's assertion, Okada's definition of "transducer" appears in the "Disclosure of Invention" section of the '364 patent (col. 3, *l.* 9 to col. 11, *l.* 11) — the section of the patent that describes the invention as a whole — not his subsequent description of specific embodiments (col. 11, *l.* 11 to col. 34, *l.* 38). *C.R. Bard, Inc.*, 388 F.3d at 864 ("Statements that describe the invention as a whole, rather than statements that describe only preferred embodiments, are more likely to support a limiting definition of a claim term" and "are more likely to be found in certain sections of the specification, such as the Summary of the Invention.") (internal citations omitted). Okada's definition of "transducer" is the one and only time he uses this term anywhere in the entire specification and therefore clearly is central to the understanding of that term. It cannot simply be ignored as Wacoh proposes.[2]

In sum, the specification of the '364 patent makes clear that Wacoh is not entitled to a broad construction of "transducer" that would remove mechanical deformation as a key requirement of the claimed invention. Thus, the "transducer for transforming . . . " element should be construed as "a device for transforming a mechanical deformation, which results from the spatial deviation of the working body, into an electric signal."

2. The "working body" transmits the received force to the transducer so that the force can be detected.

The parties agree that the claimed "working body" receives a force. The dispute relates to whether the working body must transmit this received force to the transducer, as ADI and Bosch contend (ADI/Bosch Br. at 20-21), or simply move, as Wacoh urges (Wacoh Br. at 4-6).

[2] Wacoh relies on *Market Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1382 (Fed. Cir. 2009) (Wacoh Br. at 11), but that case actually supports ADI and Bosch. In *Market Biosciences*, the Federal Circuit adopted the inventor's definition of "animal" in the patent specification because he had acted as his own lexicographer. *Id.* at 1380-81. Similarly, Okada's own definition of "transducer" in the '364 patent should be adopted here.

Wacoh argues that "working body" should be given its "plain meaning" and then in the same breath explains that this plain meaning is "a body that moves in relation to the substrate." Wacoh Br. at 5. But this definition is incomplete because it does not reflect the fact that the working body moves for a reason — to transmit the received force (that caused the working body to move) to the transducer so that this force can be detected.

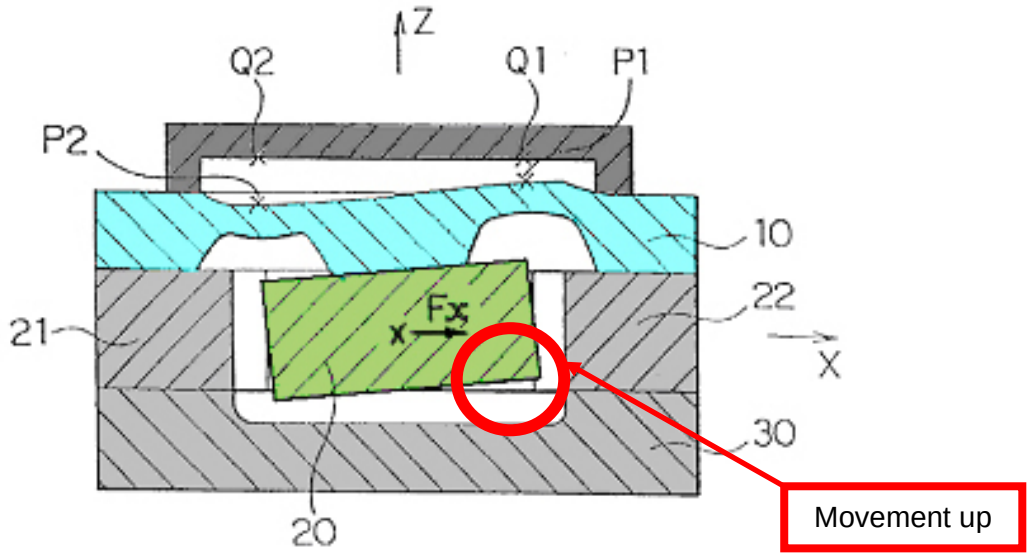
As ADI and Bosch explained in their opening brief, the specification of the '364 patent explains this mechanism by repeatedly describing how the "working body" transmits the force to the strain generative body and how the resulting mechanical deformation of the piezoresistive elements (transducers) triggers the electric signal. ADI/Bosch Br. at 21 (citing '364 patent, Abstract, col. 5, *ll.* 12-13, *ll.* 61-62, col. 8, *ll.* 39-41, col. 9, *ll.* 39-41, col. 14, *ll.* 26-31). Indeed, even the excerpt from the specification quoted by Wacoh explains that "[a] working body is provided for exerting a force on the strain generative body." Wacoh Br. at 5 (citing '364 patent, col. 1, *ll.* 37-38).[3] Thus, the specification makes clear that the "working body" should be construed as "a structure that transmits the received force to the transducer."

3. The "spatial deviation" of the working body always includes movement in a vertical direction.

The parties agree that "spatial deviation" refers to movement of the working body when a force is exerted upon it. The dispute is whether this movement must always include at least some movement in the vertical direction (with or without simultaneous movement in the horizontal direction), as ADI and Bosch contend (ADI/Bosch Br. at 21-23), or whether movement solely in a horizontal direction is possible, as Wacoh urges (Wacoh Br. at 6-10).

[3] Wacoh objects to the use of the word "transmits" in ADI and Bosch's proposed construction (Wacoh Br. at 5), but this is precisely the verb chosen by Okada to describe the function of the working body in his sensor. *See, e.g.*, '364 patent, Abstract, col. 5, *ll.* 12-13, *ll.* 61-62, col. 8, *ll.* 39-41, col. 9, *ll.* 39-41.

As ADI and Bosch explained in their opening brief, whenever a force is exerted on the working body of Okada's sensor, the resulting movement of the working body will necessarily include at least some movement in the vertical direction because the working body hangs like a pendulum. ADI/Bosch Br. at 22-23. This is clearly illustrated in Figure 21 of the '364 patent, where the working body is shown to be moving not only in the horizontal (X) direction — the direction of the applied force — but also in a vertical (Z) direction as the leading edge of the body swings forward and up, just like a pendulum:



'364 patent, Fig. 21 (annotated). Depending on the direction of the force, the working body might move forward and up, backward and up, sideways and up, or simply up and down. But like a pendulum, the working body cannot move in a horizontal direction alone. ADI/Bosch Br. at 4-5, 22-23. Indeed, some movement in the vertical direction is necessary for the working body to deform the strain generative body, which in turn triggers an electric signal. *Id.* at 5-6, 23.

Thus, Wacoh's conclusory assertion that "[n]ot once in the specification or in the claims is it suggested that the 'spatial deviation' or 'displacement' or 'movement' must always include a

vertical direction" (Wacoh Br. at 8), is demonstrably incorrect. Every single embodiment described or illustrated in the '364 patent includes a working body suspended like a pendulum that therefore necessarily will always move in a vertical direction. Indeed, Okada's depicted invention would not work if the working body did not move vertically, because without that vertical movement the piezoresistive elements would not be deformed and no electric signal would be triggered.

For the same reason, Wacoh's conclusory and unsupported assertion that "the inventor suggests" an embodiment that "could theoretically result in an extremely small rotation about an axis in the X-Y plane, without overall movement in a vertical direction" (Wacoh Br. at 9), is also incorrect. No such embodiment is disclosed in the '364 patent, which likely explains why Wacoh's assertion is not accompanied by any citation to the patent.

Wacoh's additional argument that ADI's and Bosch's construction must be incorrect because certain embodiments (and claims) of the '364 patent only detect acceleration in the horizontal X-direction (Wacoh Br. at 8-9) is flawed and should be rejected. Wacoh's argument conflates two distinct concepts: (1) the direction in which the working body *moves* when it is subjected to a force (which must at least include the vertical direction); and (2) the component of that movement in the horizontal or vertical direction that is actually *detected* by the sensor (which need not include the vertical direction). For example, as shown in Figure 21 above, even where the sensor detects acceleration only in the horizontal X-direction, the working body still moves in both the horizontal X-direction and the vertical Z-direction because it is like a pendulum. '364 patent, col. 22, *ll.* 47-58, Fig. 21.

If Wacoh is instead arguing that ADI's and Bosch's proposed construction would mandate movement of the working body only in the vertical Z-direction and not any other

direction, then Wacoh misunderstands ADI's and Bosch's position. ADI and Bosch contend only that in order for Okada's sensor to function, the spatial deviation of the working body must always *include* some movement in a vertical direction, not that it must move *only* in the vertical direction. ADI/Bosch Br. at 4-5, 22-23.

Finally, ADI and Bosch do not dispute Wacoh's assertion that "spatial deviation" is essentially synonymous with the term "displacement" used in the '364 patent. Wacoh Br. at 6-7. But as described above and in ADI's and Bosch's opening brief, the specification goes further and also describes and illustrates how the "displacement" of the working body necessarily includes movement in a vertical direction. ADI/Bosch Br. at 21-23. It is this description of the invention that governs the claim construction analysis, not the generic dictionary definition of "displacement" that Wacoh cites in an attempt to broaden the meaning of this term beyond the manner in which it was used by Okada. Wacoh Br. at 8 (citing Ex. B).

B. The test method claim terms should be interpreted to require formation in the sensor of a distinct capacitance element used to move the working body during the test.

The remaining claim terms relate to the method of testing the sensor: (1) "providing a capacitance element," (2) "capacitance element," (3) "deviation electrode," (4) "fixed electrode," and (5) "Coulomb force." The principal dispute regarding the test method limitations is whether a distinct "capacitance element" (including a "fixed" electrode and a "deviation" electrode) must be formed inside the sensor before the test can be carried out, as ADI and Bosch contend, or whether the capacitance element does not have to be a distinct element, as Wacoh contends. Once again, the parties' proposed constructions of these terms are set forth below.

Term	ADI's and Bosch's Proposed Construction	Wacoh's Proposed Construction
"providing a capacitance element"	"forming a capacitance element within the sensor"	"providing opposing electrodes capable of holding a charge"
"capacitance element"	"a pair of electrodes that together operate as a capacitor, each of which is distinct from the transducer"	"opposing electrodes capable of holding a charge"
"deviation electrode"	"a discrete movable structure made of conductive material that is distinct from the working body"	Plain meaning
"fixed electrode"	"a discrete fixed structure made of conductive material that is distinct from the substrate"	Plain meaning
"Coulomb force"	"an attractive force when a voltage applied to the deviation electrode and a voltage applied to the fixed electrode are of opposite polarities and a repulsive force when a voltage applied to the deviation electrode and a voltage applied to the fixed electrode are of the same polarity"	"a force of attraction or repulsion caused by charged electrodes"

1. The "capacitance element" must be formed inside the sensor in order to carry out the test.

ADI's and Bosch's proposed construction of "providing a capacitance element" — "forming a capacitance element within the sensor" — should be adopted because it seeks to clarify what the ambiguous term "providing" means in the context of this invention.

As ADI and Bosch explained in their opening brief, the claim introduces the "capacitance element" not as part of the basic sensor structure in the sensor portion of the claim but instead as an additional element that must be "provided" in the first step in the test method portion of the claim. ADI/Bosch Br. at 24. Thus, the "capacitance element" is an additional structure that must be constructed inside the sensor before the remaining steps of the test can be carried out, including the second step of "applying a voltage" between the two electrodes of the capacitance element to "cause[] spatial deviation of the working body." '364 patent, col. 34, *l.* 56 – col. 35, *l.* 8. Okada confirms this in the specification, where he explains that the initial step of his test method is to "form" the electrodes of the capacitance element "within the sensor": "[i]nitially, *several electrode layers are formed* at predetermined portions *within the sensor*." *Id.*, col. 20, *ll.* 62-67; *see also id.* col. 21, *ll.* 2-36 (emphasis added); ADI/Bosch Br. at 24-25.

Thus, contrary to Wacoh's conclusory assertion that ADI and Bosch have "attempted to unnecessarily complicate a readily understood term without support from the claims or other intrinsic evidence" (Wacoh Br. at 12), ADI's and Bosch's proposed construction actually clarifies the meaning of "providing" and tracks the very language used by the inventor to describe the initial step of his test method.

Wacoh's argument that no construction is required because "providing" is not a "technical term" (Wacoh Br. at 11) should be rejected because claim construction is not limited to technical terms. Courts also must interpret non-technical terms to ensure that they comport with the invention described in the specification. *See, e.g.*, *Curtiss-Wright Flow Corp. v. Velan, Inc.*, 438 F.3d 1374, 1378 (Fed. Cir. 2006) (reversing district court's construction of term "adjustable" because it "place[d] too much emphasis on the ordinary meaning of 'adjustable' without adequate grounding of that term within the context of the specification"); *Tap Pharm.*

Prods., Inc. v. Owl Pharms., L.L.C., 419 F.3d 1346, 1354 (Fed. Cir. 2005) ("While the term 'containing' is not a technical term, the term is essential in helping to describe the patented technology. As a result, the term cannot be defined by some ordinary meaning isolated from the proper context . . . . "); *Bell Atl. Network Servs. v. Covad Communs. Group*, 262 F.3d 1258, 1269-70 (Fed. Cir. 2001) ("the ordinary meaning of the *non-technical term* 'mode' is sufficiently broad and amorphous that the scope of the claim language can be reconciled only with recourse to the written description") (emphasis added).

Finally, Wacoh's reliance on *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999), for the proposition that "[c]ourts do not rewrite claims" but instead "give effect to the terms chosen by the patentee" (Wacoh Br. at 11) is misplaced. ADI's and Bosch's proposed construction does "give effect" to the claim language chosen by Okada by tracking the language he used in the specification to explain that claim language.

2. The "capacitance element" that must be formed inside the sensor is distinct from the transducer in the sensor.

Wacoh does not seriously dispute that the pair of electrodes that comprise the "capacitance element" do, in fact, "together operate as a capacitor." Indeed, Wacoh asserts that the term "capacitance element" is a "general term well known to one of the skill in the art" and then cites a dictionary definition of "capacitance" that includes the term "capacitor."[4] Wacoh Br. at 12; *id.* at 14 ("[t]he ratio of the charge on one of the conductors *of a capacitor* (there being an equal and opposite charge on the other conductor) to the potential difference between the conductors") (emphasis added) (citing Ex. D). This dictionary definition reinforces the

[4] Wacoh's criticism that ADI's and Bosch's proposed inclusion of the term "capacitor" in their construction is "circular" (Wacoh Br. at 14) is undercut by the fact that Wacoh's own dictionary definition of "capacitance" includes the term "capacitor."

conclusion that Okada plainly used the term "capacitance" to modify the term "element" because he understood that the electrodes that comprise the "capacitance element" operate as a capacitor. ADI/Bosch Br. at 26. Why else would he call it a "capacitance" element?

Both the claim language and the specification also demonstrate that the "capacitance element" must be "distinct from the transducer," as ADI's and Bosch's proposed construction provides. These two elements are consistently described and treated in the '364 patent as distinct structural elements with very distinct and different functions. The "capacitance element" is described as being comprised of the opposing electrodes (the "deviation electrode" and the "fixed electrode") between which a voltage is applied to move the working body during the test. ADI/Bosch Br. at 26-28. In contrast, the "transducer" is described as the separate and very different element that detects the movement of the working body — both during the test and during normal operation of the sensor — by transforming the resulting mechanical deformation into an electric signal. *Id.*

Wacoh argues that the specification's treatment of the "capacitance element" and the "transducer" as distinct elements with distinct functions is merely exemplary, and that the '364 patent does not require that they be distinct. Wacoh Br. at 14. But there is nothing in the patent that remotely suggests that the "capacitance element" and the "transducer" can be the same structure. Every embodiment described and illustrated in the patent treats these two elements as distinct elements with distinct functions. ADI/Bosch Br. at 26-28 (citing '364 patent, Figs. 1, 2, 19; col. 13, *ll.* 23-43; col. 14, *ll.* 26-41; col. 15, *ll.* 50-67; col. 21, *ll.* 6-30). Okada did not even hint at, much less describe, any other embodiment in which these two elements are not distinct, or explain how such an embodiment could possibly work. Nor did he say anything in the patent to suggest that his disclosed embodiments are merely exemplary in this respect. In light of this

consistent description of his invention in the specification, these two elements should be construed to be distinct. *Becton, Dickinson & Co. v. Tyco Healthcare Group, LP*, Nos. 2009-1053, 2009-1111, ___ F.3d ____, 2010 WL 2977612, *5 (Fed. Cir. July 29, 2010); *Gaus v. Conair Corp.*, 363 F.3d 1284, 1288 (Fed. Cir. 2004).

Wacoh also invokes the truism that the claims define the scope of the invention, and then asserts that "no such limitation [that the "capacitance element" and "transducer" must be distinct] is expressly found in the claim." Wacoh Br. at 14. Wacoh is mistaken. As ADI and Bosch explained in their opening brief, the claim language does, in fact, draw this distinction — just like the specification. ADI/Bosch Br. at 26-27. The claims use the term "capacitance element" in the test method portion to refer to the additional structural element that must be constructed inside the sensor to carry out the test and, in particular, to "cause spatial deviation" of the "working body" during the test. '364 patent, col. 34, *l.* 56 – col. 35, *l.* 5. In contrast, the claims use the different term "transducer" in the sensor portion to refer to the distinct structural element in the sensor that is used to detect the movement of the working body — by "transforming" the mechanical deformation that results from the "spatial deviation" of the working body "into an electric signal." *Id.*, col. 34, *l.* 52 – col. 35, *l.* 5. Thus, contrary to Wacoh's argument, "the 'clear implication of the claim language' is that those elements are 'distinct component[s]' of the patented invention." *Becton*, 2010 WL 2977612 at *4.[5]

[5] Wacoh's reliance on *Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009), is misplaced. In *Kara*, which involved a patent on an apparatus to verify the authenticity of documents, the Federal Circuit held that claims that did not expressly recite the use of a "key" should not be interpreted to require the use of one. But in coming to this conclusion, the court relied primarily on the fact that the asserted claims did not expressly require the use of a "key" whereas other unasserted claims in the patent did. *Id.* In contrast, every claim of the '364 patent treats the "capacitance element" and the "transducer" as separate and distinct structural elements with distinct functions.

3. The "deviation electrode" in the capacitance element that must be formed inside the sensor is distinct from the working body in the sensor.

Wacoh understandably does not dispute that portion of ADI's and Bosch's proposed construction of "deviation electrode" that states that this electrode is movable and made of a conductive material. Wacoh Br. at 15-16; ADI/Bosch Br. at 29. Wacoh does argue, however, that there is "nothing in the claims or the specification that requires that the deviation electrode be 'discrete' or 'distinct from the working body.'" Wacoh Br. at 15. Wacoh is wrong on both counts because both the claim language and the specification require that the "deviation electrode" be discrete and distinct from the "working body."

Each claim refers to the "deviation electrode" and the "working body" as separate structural elements and specifically recites that the "deviation electrode . . . *deviates along with* said working body." '364 patent, col. 34, *l.* 58-59 (emphasis added). As ADI and Bosch explained in their opening brief, two things that "deviate along with" one another cannot be the same thing but must instead be discrete and distinct from one another. ADI/Bosch Br. at 29. Indeed, Wacoh tacitly acknowledges that the deviation electrode is distinct from the working body in stating that the deviation electrode is the electrode "that moves *with* the body that moves." Wacoh Br. at 15 (emphasis added). The fact that these two elements are distinct is also shown by the fact that the "working body" is part of the structure of the basic sensor recited in the sensor portion of the claim whereas the "deviation electrode" is part of the distinct "capacitance element" (that must be constructed inside the sensor to carry out the test) recited in the test method portion of the claim.

The specification confirms this distinction by consistently describing how the deviation electrode is "formed on" the surface of the working body. ADI/Bosch Br. at 30 (citing '364 patent, Figs. 19, 51; col. 21 *ll.* 12-17; col. 33, *ll.* 44-45). For the same reason that two things that

move "along with" one another cannot be the same thing, something that is "formed on" something else must be distinct from it. Moreover, the specification does not describe or illustrate any embodiment in which the deviation electrode and working body are not discrete and distinct structures. The vague statement in the specification quoted by Wacoh does not even refer to the working body, much less disclose that it need not be distinct from the deviation electrode. Wacoh Br. at 15 (citing '364 patent, col. 25, *ll.* 18-24).[6]

4. The "fixed electrode" in the capacitance element that must be formed inside the sensor is distinct from the substrate in the sensor.

Wacoh does not dispute that portion of ADI's and Bosch's proposed construction of "fixed electrode" that specifies that the electrode is fixed and made of a conductive material. Wacoh Br. at 16-17; ADI/Bosch Br. at 29. Wacoh does argue, however, that the "fixed electrode" need not be "discrete" and "distinct from the substrate" because "nothing in the drawings or the written description requires that they be separate." Wacoh Br. at 16. Once again, Wacoh is wrong because both the claim language and the specification make clear that the "fixed electrode" must be discrete and distinct from the substrate.

Each claim refers to the "fixed electrode" and the "substrate" as separate structural elements and also recites that the "fixed electrode" is "*fixed to* said substrate." '364 patent, col. 34, *l.* 60 (emphasis added). As ADI and Bosch explained in their opening brief, this shows that

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[6] Wacoh's argument that the "myriad of meanings associated with the word ['discrete'] should preclude its use in the meaning of a disputed claim term in this patent" (Wacoh Br. at 15-16 (citing Ex. E)) is puzzling because the dictionary definition of "discrete" cited by Wacoh tends to prove exactly the opposite. The dictionary definition has only three given definitions, not a "myriad of meanings," and the first two definitions are virtually synonymous: "**1 :** constituting a separate entity : individually distinct" and "**2 a :** consisting of distinct or unconnected elements : NONCONTINUOUS." Wacoh Br., Ex. E at 332. The third definition is from the field of statistics and plainly does not apply in this context: "**2 b :** taking on or having a finite or countably infinite number of values <~ probabilities > <a ~ random variable>." *Id.*

these two elements are discrete and distinct from one another because one thing cannot be "fixed to" something else unless they are two distinct things. ADI/Bosch Br. at 30. Moreover, the "substrate" is recited as part of the structure of the basic sensor in the sensor portion of the claim whereas the "fixed electrode" is recited in the test method portion as part of the distinct "capacitance element" that must be constructed inside the sensor to carry out the test.

The specification confirms that the "fixed electrode" is discrete and distinct from the "substrate" by consistently describing how this electrode is "formed on" the top surface of the substrate. ADI/Bosch Br. at 30 (citing '364 patent, Figs. 19, 51; col. 21 *ll.* 12-17; col. 33, *ll.* 44-45). Contrary to Wacoh's argument, it is precisely because the electrode is "formed on" the substrate that it is shown in the figures as a distinct structure using hatch-marks. '364 patent, Figs. 19, 51; Wacoh Br. at 16. The specification does not describe or illustrate any embodiment in which the fixed electrode and substrate are not discrete and distinct structures.[7]

5. The inventor assigned a special meaning to "Coulomb force" in the context of his invention.

The parties agree that a "Coulomb force" is an electrostatic force of attraction or repulsion. Wacoh Br. at 17; ADI/Bosch Br. at 31. But Wacoh does not agree with ADI and Bosch that Okada acted as his own lexicographer when he further defined "Coulomb force" to refer to the specific types of electrostatic forces that are exerted by the deviation electrode and the fixed electrode in his invention, specifically: (a) an attractive force when the voltages applied to these two electrodes are of opposite polarities; and (b) a repulsive force when these voltages

[7] Wacoh incorrectly states in its brief that ADI's and Bosch's proposed construction would require the "fixed electrode" to be "distinct from the *working body*" when in fact the proposed construction would require it to be "distinct from the *substrate*." *Compare* Wacoh Br. at 16 *with* ADI/Bosch Br. at 29.

are of the same polarity. ADI/Bosch Br. at 31-32 (citing '364 patent, col. 5, *ll.* 50-52, col. 6, *ll.* 9-19, col. 21, *ll.* 43-49); Wacoh Br. at 17-18.

Wacoh's primary argument is that Okada did not provide a special definition of "Coulomb force" in the specification. But even the excerpts from the specification on which Wacoh relies demonstrate otherwise. Wacoh Br. at 18. Tellingly, several of Wacoh's quotations from the specification truncate the additional language that supports ADI's and Bosch's proposed construction. For example, Wacoh relies on the following sentence:

> When voltages are applied to electrodes opposite in this way, respectively, coulomb forces are exerted between the respective both electrode layers.

Wacoh Br. at 18 (citing '364 patent, col. 21, *ll.* 43-46). But the very next sentence, which Wacoh omits, supports ADI's and Bosch's construction:

> Namely, when voltages of the same polarity are applied to the both electrode layers, a repulsive force is exerted, while when voltages of different polarities are applied thereto, an attractive force is exerted.

'364 patent, col. 21, *ll.* 46-49 (emphasis added). Wacoh also relies on this sentence:

> In accordance with the second feature, by applying a voltage across two opposite electrode layers, a coulomb force can be exerted.

Wacoh Br. at 18 (citing '364 patent, col. 5, *ll.* 47-49). But once again, the next sentence, which Wacoh once again omits, supports ADI and Bosch:

> In addition, by selecting the polarity of an applied voltage, the coulomb force can be exerted as either a repulsive force or an attractive force.

'364 patent, col. 5, *ll*. 49-52. Finally, Wacoh relies on a portion of the following sentence:

> If an approach is employed to form such electrode layers to apply voltages of predetermined polarities to respective electrode layers, a coulomb force is exerted between opposite electrode layers, thus

> making it possible to exert a force on the weight body 320 although no acceleration is exerted.

Wacoh Br. at 18 (citing '364 patent, col. 33, *ll.* 51-53). But the next sentence, which Wacoh again omits, makes clear that the polarities of the voltages applied to the electrodes will dictate whether the Coulomb force is attractive or repulsive, and, therefore, will determine its direction as either toward or away from the opposing electrode:

> By varying polarities of voltages applied to respective electrode layers, it is possible to apply a force in various directions.

'364 patent, col. 33, *ll.* 55-57.

In light of the statements from the specification that Wacoh omitted from its quotations, Wacoh's criticism of ADI's and Bosch's proposed construction as nothing more than "additional verbiage" that "attempts to describe Coulomb force as something specific to this invention, contrary to its plain meaning" falls flat. Wacoh Br. at 18. As the above excerpts show, the additional language in ADI's and Bosch's proposed construction tracks the language used by Okada in the specification when he acted as his own lexicographer and assigned this special definition to "Coulomb force" in the context of his invention. By doing so, he limited the meaning of this claim term to this special definition. *Phillips*, 415 F.3d at 1316; *Honeywell*, 493 F.3d at 1361-6.

III. CONCLUSION

For the reasons set forth above and in their opening brief, ADI and Bosch respectfully request that the Court adopt their proposed claim constructions.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that this document was filed through the ECF system on October 1, 2010 and will be sent electronically to the registered participants as identified on the Notice of Electronic Filing (NEF), and that paper copies will be sent to those indicated as non registered participants.

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